

PST ZK60FA(B)

FAST RECOVERY DIODE

Features

- Blocking Capability up to 1400 V
- High Surge Rating
- Stud Cathode and Stud Anode Version

ELECTRICAL CHARACTERISTICS AND RATINGS

Blocking

Parameter	Symbol	Min	Max	Typ	Unit	Conditions
Repetitive peak reverse voltage	V_{RRM}		1400		V	$T_j = -40\text{ °C to }150\text{ °C}$
Non repetitive peak reverse voltage	V_{RSM}		1400		V	$T_j = -40\text{ °C to }150\text{ °C}$
Repetitive peak reverse current	I_{RRM}		60		mA	$T_j = T_{jmax}, V = V_{RRM}$

Conducting

Parameter	Symbol	Min	Max	Typ	Unit	Conditions
Average value of forward current	$I_{F(AV)}$		60		A	50 Hz sinewave, 180° conduction, $T_c = 100\text{ °C}$
RMS value of forward current	$I_{F(RMS)}$		94		A	50 Hz sinewave, 180° conduction, $T_c = 35\text{ °C}$
Peak one cycle surge (non repetitive) current	I_{FSM}		1.2		kA	50 Hz sinewave, 180° conduction, $T_j = T_{jmax}, V_R = 0$
I square t	$I^2 t$		7.2		kA^2s	$T_j = T_{jmax}$
Peak forward voltage	V_{FM}		1.55		V	Forward current 150 A, $T_j = T_{jmax}$
Threshold voltage	$V_{F(TO)}$		0.95		V	$T_j = T_{jmax}$
Forward slope resistance	r_F		4.0		mΩ	$T_j = T_{jmax}$

Thermal and mechanical characteristics and ratings

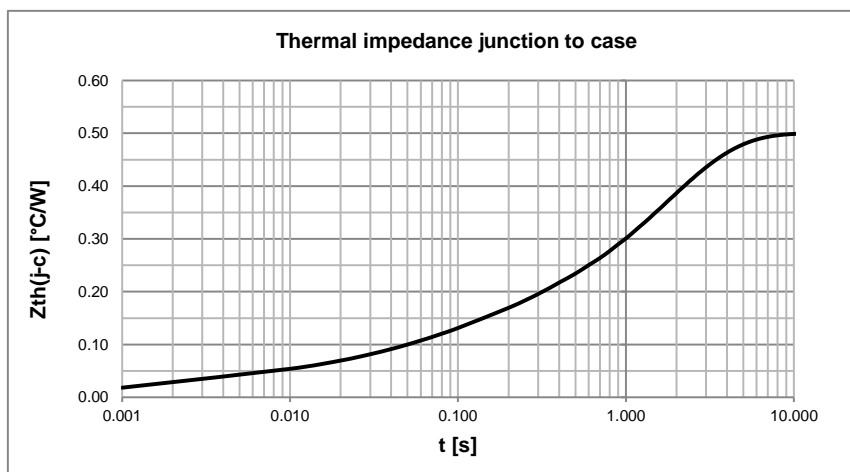
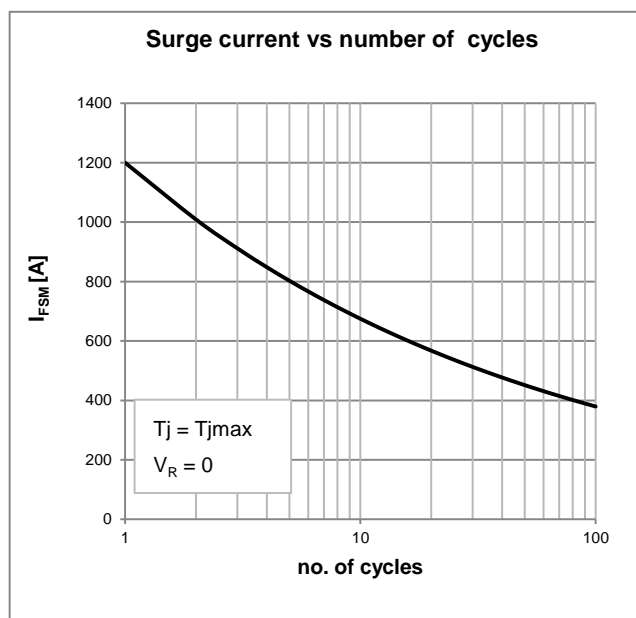
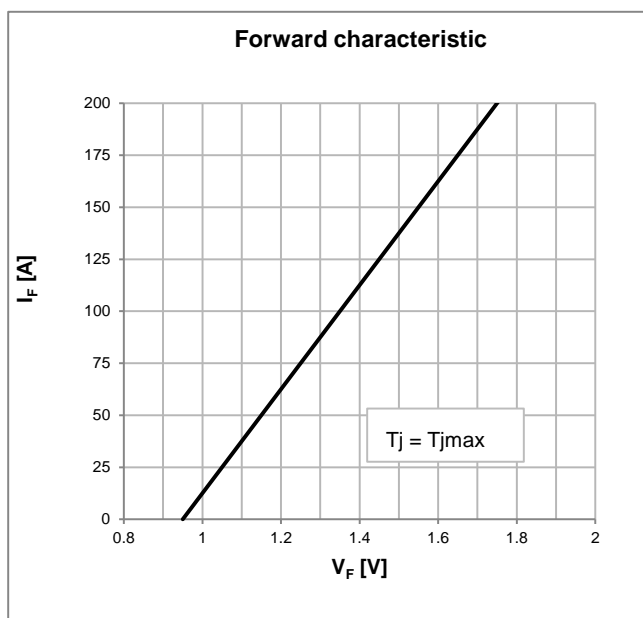
Parameter	Symbol	Min	Max	Typ	Unit	Conditions
Operating temperature	T_j	-40	150		°C	
Storage temperature	T_{stg}	-40	150		°C	
Thermal resistance junction to case	$R_{th(j-c)}$		0.50		°C/W	180° SIN
Thermal resistance case to sink	$R_{th(c-s)}$		0.25		°C/W	Mounting surfaces smooth, flat and greased
Mounting torque	M		2.5		N·m	
Weight	W			20	g	

PST ZK60FA(B)

FAST RECOVERY DIODE

Switching

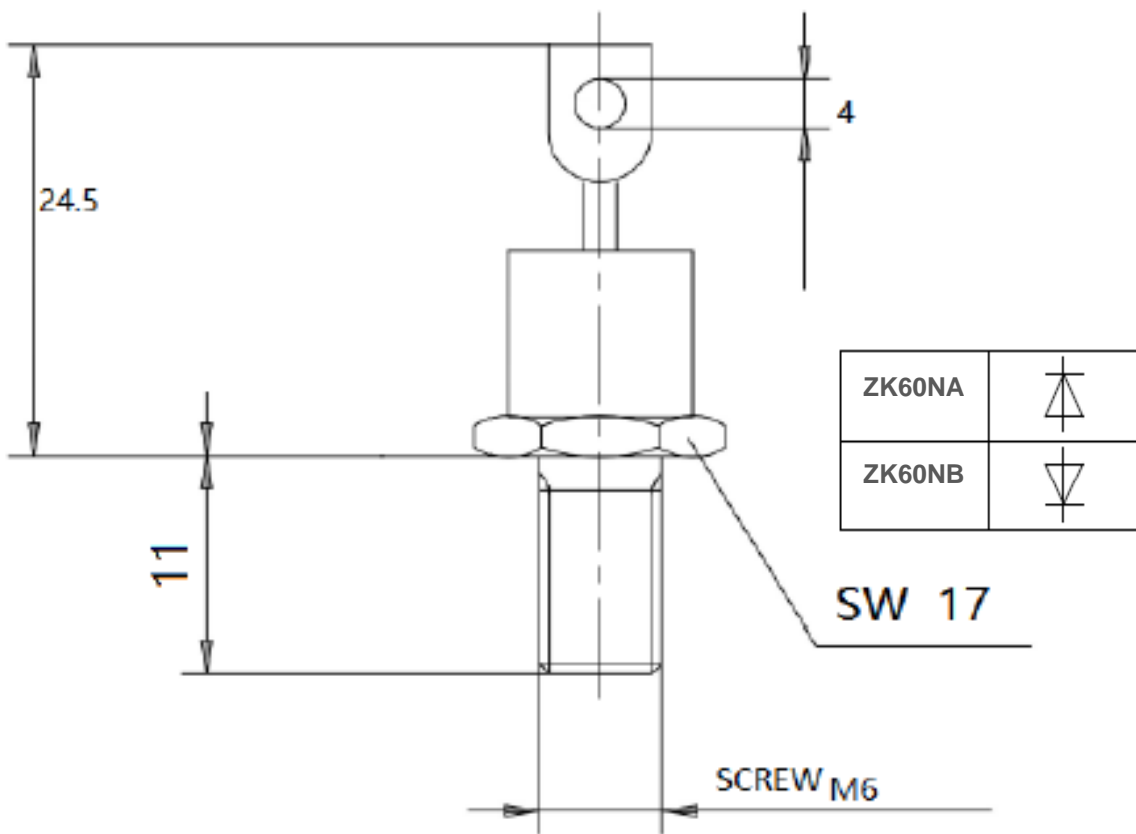
Parameter	Symbol	Min	Max	Typ	Unit	Conditions
Reverse recovery current	I_{rr}		70		A	$I_F = 100 \text{ A}$, $di_F / dt = 100 \text{ A}/\mu\text{s}$ $V_R = 30 \text{ V}$ $T_j = T_{jmax}$
Reverse recovery charge	Q_{rr}		75		μC	
Reverse recovery time	t_{rr}		2.1		μs	



PST ZK60FA(B)

FAST RECOVERY DIODE

OUTLINE AND DIMENSIONS



dimensions in mm